

Response to Public Comments Summary

DuPont Johnsonville North Hollow Class II Landfill - (IDL 43-0087) Major Modification
New Johnsonville, Humphreys County, Tennessee

The following comments were entered into public record after the public comment period ended on March 8, 2007, for the proposed major modification to the DuPont Johnsonville North Hollow Class II Landfill.

1. Comment

If it was hazardous waste in the 1990's, how come is not hazardous waste now?

Response

The waste disposed in the North Hollow landfill, called Iron-Rich co-product does not meet the definition of either a listed or a characteristic hazardous waste, nor has it ever been classified as a hazardous waste.

2. Comment

DuPont is seeking a major modification for its landfill permit, which will include what it can put into its landfill. Will dioxin be monitored as part of this process?

Response

There are specific monitoring parameters used for groundwater contamination detection at Class II Subtitle D landfills. Some of these criteria are based on the solubility (i.e., the ability for a chemical to dissolve and to move in or with groundwater), and the known or suspected presence of that compound in the facility's waste stream. Dioxin is not a good candidate for detection monitoring, but this parameter will be added to the North Hollow Landfill groundwater assessment monitoring list (Appendix II list).

3. Comment

Do we know:

- 1) Is there groundwater contamination already?
- 2) Which way the groundwater is moving?

Response

- 1) There has been no indication of groundwater contamination at the DuPont Johnsonville facility.

- 2) Groundwater recharge in the facility's vicinity is influenced strongly by surface water. For this reason, groundwater flow is in the same general direction as surface water. Groundwater from the North Hollow Landfill flows toward Stave Hollow, then toward the Tennessee River, and then generally north with the Tennessee River.

4. Comment

Is the groundwater moving toward the Tennessee River?

Response

Please see the response to the second question in comment #3.

5. Comment

Have we sufficiently characterized this waste product (Iron Rich Material)? Do we know everything that's in there?

Response

A general waste characterization has been documented for the DuPont Johnsonville facility. In response to a more specific waste characterization requested by the Division of Solid Waste Management, DuPont Johnsonville has submitted a detailed and certified waste characterization. This information is being made available for public review and comment.

6. Comment

Are there land areas getting contaminated through dust? We heard that mentioned several times, through air transport?

Response

The Iron-Rich material disposed of in their landfill has a consistency of pea gravel in size and shape. A material this size would not be susceptible to wind dispersion as silt or sand would be. Further, the disposal facility must provide a means to control dust at its location in order to satisfy permit conditions.

7. Comment

Are humans being exposed through dust?

Response

Please see comment #6 response above.

8. Comment

Are humans being exposed through the groundwater to the Tennessee River to bioaccumulation?

Response

There is no indication that materials in the landfill facilities at DuPont New Johnsonville are being released to groundwater or into the Tennessee River. For this reason, there is also no indication that humans using groundwater or surface water in New Johnsonville are being exposed to bioaccumulative materials as a result of the DuPont landfill operations.

9. Comment

Have any human health/ecological risk assessments been conducted for this site?

Response

No. Human health/ecological risk assessments are only conducted when there are indications that groundwater protection standards have been exceeded, or if there is reason to believe that either human health or the environment is at risk from exposure to a contaminant.

The Division of Solid Waste Management recently requested that DuPont provide additional information about the chemical composition and characteristics of the waste streams being disposed/proposed for disposal at the North Hollow landfill. DuPont's response to this request includes results from site wide sampling, and indicates that there is no release of the North Hollow waste stream materials into the surface water or soils at the DuPont Johnsonville facility. This information is being made available for public review and comment.

10. Comment

Is 200,000 tons/yr or 100,000 tons/yr of iron rich material being produced by the DuPont New Johnsonville Plant?

Response

It varies, and is proportional to the facility's TiO₂ production. Currently, the DuPont Johnsonville Plant disposes of approximately 200,000 tons per year of Iron Rich co-product in their permitted North Hollow Class II disposal facility. This permit modification is for adding a different waste stream for disposal in the landfill, which consists of dewatered solids from an onsite wastewater treatment pond. The annual disposal volume for this additional waste stream is estimated at approximately 30,000 tons per year.

11. Comment

The Toxic Release Inventory data from EPA shows that in excess of 24 pounds of dioxin and dioxin-like compounds were placed in the DuPont Johnsonville landfill in 2004. Are these compounds in the landfill threatening the health of the community?

Response

Since dioxin and dioxin-like compounds are not addressed in the permit application, TDEC requested DuPont to submit information on dioxin sources and monitoring data for dioxin in all landfills on the DuPont plant property. TDEC has reviewed this data and concludes that while these compounds are found in the waste lagoons and landfills, the dioxin compounds are not migrating into soils or groundwater. All information submitted by DuPont related to dioxin is being made available for public review and comment prior to a final permit decision by TDEC.

It is worth noting that while a total of approximately 24 pounds of dioxins and dioxin-like compounds were placed into the landfill in 2004 (and proportionally similar amounts during other years), this does not represent the disposal of a pure dioxin waste into the landfill. The dioxin present in the iron rich co-product stream is a trace impurity present in the waste stream in the parts per billion concentration range (to put this into perspective, 1 part per billion is equivalent to 1 penny out of ten million dollars).